

=====

Sequence Listing was accepted with existing errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: Wed May 23 12:45:08 EDT 2007

=====

Application No: 10595619 Version No: 1.1

Input Set:

Output Set:

Started: 2007-05-23 12:44:57.594
Finished: 2007-05-23 12:44:58.296
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 702 ms
Total Warnings: 12
Total Errors: 0
No. of SeqIDs Defined: 15
Actual SeqID Count: 15

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)

SEQUENCE LISTING

<110> Evotec NeuroSciences GmbH

<120> Diagnostic and Therapeutic Use of the human DAX-1 gene
and protein for neurodegenerative diseases

<130> 042327wo Me/FM

<140> 10595619

<141> 2006-05-01

<150> PCT/EP2004/052684

<151> 2004-10-28

<160> 15

<170> PatentIn Ver. 2.1

<210> 1

<211> 470

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Gly Glu Asn His Gln Trp Gln Gly Ser Ile Leu Tyr Asn Met
1 5 10 15

Leu Met Ser Ala Lys Gln Thr Arg Ala Ala Pro Glu Ala Pro Glu Thr
20 25 30

Arg Leu Val Asp Gln Cys Trp Gly Cys Ser Cys Gly Asp Glu Pro Gly
35 40 45

Val Gly Arg Glu Gly Leu Leu Gly Gly Arg Asn Val Ala Leu Leu Tyr
50 55 60

Arg Cys Cys Phe Cys Gly Lys Asp His Pro Arg Gln Gly Ser Ile Leu
65 70 75 80

Tyr Ser Met Leu Thr Ser Ala Lys Gln Thr Tyr Ala Ala Pro Lys Ala
85 90 95

Pro Glu Ala Thr Leu Gly Pro Cys Trp Gly Cys Ser Cys Gly Ser Asp
100 105 110

Pro Gly Val Gly Arg Ala Gly Leu Pro Gly Gly Arg Pro Val Ala Leu
115 120 125

Leu Tyr Arg Cys Cys Phe Cys Gly Glu Asp His Pro Arg Gln Gly Ser
130 135 140

Ile Leu Tyr Ser Leu Leu Thr Ser Ser Lys Gln Thr His Val Ala Pro
145 150 155 160

Ala Ala Pro Glu Ala Arg Pro Gly Gly Ala Trp Trp Asp Arg Ser Tyr
165 170 175

Phe Ala Gln Arg Pro Gly Gly Lys Glu Ala Leu Pro Gly Gly Arg Ala
180 185 190

Thr Ala Leu Leu Tyr Arg Cys Cys Phe Cys Gly Glu Asp His Pro Gln
195 200 205

Gln Gly Ser Thr Leu Tyr Cys Val Pro Thr Ser Thr Asn Gln Ala Gln
210 215 220

Ala Ala Pro Glu Glu Arg Pro Arg Ala Pro Trp Trp Asp Thr Ser Ser
225 230 235 240

Gly Ala Leu Arg Pro Val Ala Leu Lys Ser Pro Gln Val Val Cys Glu
245 250 255

Ala Ala Ser Ala Gly Leu Leu Lys Thr Leu Arg Phe Val Lys Tyr Leu
260 265 270

Pro Cys Phe Gln Val Leu Pro Leu Asp Gln Gln Leu Val Leu Val Arg
275 280 285

Asn Cys Trp Ala Ser Leu Leu Met Leu Glu Leu Ala Gln Asp Arg Leu
290 295 300

Gln Phe Glu Thr Val Glu Val Ser Glu Pro Ser Met Leu Gln Lys Ile
305 310 315 320

Leu Thr Thr Arg Arg Glu Thr Gly Gly Asn Glu Pro Leu Pro Val
325 330 335

Pro Thr Leu Gln His His Leu Ala Pro Pro Ala Glu Ala Arg Lys Val
340 345 350

Pro Ser Ala Ser Gln Val Gln Ala Ile Lys Cys Phe Leu Ser Lys Cys
355 360 365

Trp Ser Leu Asn Ile Ser Thr Lys Glu Tyr Ala Tyr Leu Lys Gly Thr
370 375 380

Val Leu Phe Asn Pro Asp Val Pro Gly Leu Gln Cys Val Lys Tyr Ile
385 390 395 400

Gln Gly Leu Gln Trp Gly Thr Gln Gln Ile Leu Ser Glu His Thr Arg
405 410 415

Met Thr His Gln Gly Pro His Asp Arg Phe Ile Glu Leu Asn Ser Thr
420 425 430

Leu Phe Leu Leu Arg Phe Ile Asn Ala Asn Val Ile Ala Glu Leu Phe
435 440 445

Phe Arg Pro Ile Ile Gly Thr Val Ser Met Asp Asp Met Met Leu Glu
450 455 460

Met Leu Cys Thr Lys Ile
465 470

<210> 2
<211> 2022
<212> DNA
<213> Homo sapiens

<400> 2
gagctcccac gctgctgttc ttccatttcc agctttaaa gagcacccgc cccttcgaac 60
caccgaggc atggcgaaac acaccggagc gcagaccgcg cccccccgca cacaccgccc 120
gcctccgcgc ccttgcggc accgaggcgg ccgacgcgc tgctgtgcgc ctaggtataa 180
ataggtccca ggaggcagcc actggcaga actggctac gggcgccgcg ggccatggcg 240
ggcgagaacc accagtggca gggcagcatc ctctacaaca tgcttatgag cgcgaaagcaa 300
acgcgcgcgg ctccctgaggc tccagagac cggctggtgg atcagtgttg gggctgtcg 360
tgccggcgatg agccgggggt gggcagagag gggctgtgg gccggcgaa cgtggcgctc 420
ctgtaccgcgct gctgcttttgc cggtaaaagac caccacggc agggcagcatc cctctacagc 480
atgctgacga gcgcaaaagca aacgtacgcg gcaccgaagg ccccgaggc gacgctgggt 540
ccgtgctggg gctgctcgat cggctctgat cccgggggtgg gcagagcggg gcttccgggt 600
gggcggcccc tggcactcct gtaccgcgtc tgctttgtg gtgaagacca cccgcggcag 660
ggcagcatcc tctacagctt gtcactagc tcaaagcaa cgcacgtggc tccggcagcg 720
cccgaggcac ggccagggggg cgcgtggtgg gaccgcgttgc acttcgcgc gaggccagg 780
gttaaagagg cgctaccagg cggggcgcc acggcgcttc tgcgtggctg ctgctttgc 840
gttgaagacc accccagca gggcagcacc ctctactgcg tgccacgag cacaatcaa 900
gcgcaggcgg ctccggagga gcccggcggagg gccccctggt gggacacctc ctctggcgc 960
ctgcggccgg tggcgtcaa gagtccacag gtggctgcg aggacgcctc agcggggctg 1020
ttgaagacgc tgcgttcgt caagtacttg ccctgcgttcc aggtgtgcg cctggaccag 1080
cagctggcgc tggcgtcggc ctgcgtggcgc tccctgcgtca tgcttgagct ggcccaggac 1140
cgcttgcagt tcgagactgt ggaagtctcg gagcccagca tgctgcagaa gatcctcacc 1200
accaggcggc gggagaccgg gggcaacgcg ccactgccc tgccacgct gcagcaccat 1260
ttggcaccgc cggcggaggc caggaagggtg ccctccgcct cccaggtcca agccatcaag 1320
tgctttctt ccaaatgctg gagtctgaac atcagtacca aggagtacgc ctacctaag 1380
gggaccgtgc tcttaaccc ggacgtccgc ggcctgcagt gcgtgaagta cattcaggga 1440
ctccagtggg gaactcagca aataactcagt gaacacacca ggtgacgc ccaaggcccc 1500
catgacagat tcatcgaact taatagtacc ctttcctgc tgagattcat caatgccaat 1560
gtcattgctg aactgttctt caggccatc atcggcacag tcagcatgga tgatatgatg 1620
ctggaaatgc tctgtacaaa gatataaagt catgtggcc acacaagtgc agtagtgcag 1680
ttcaccatga gggagaata aagagctgtg ggcaaaagag tgtaaaatat tttaaaataa 1740
actttcttaa tattttaca tgcagagtat tttgatcttca aatcaaagaa ataattttat 1800
tcccagcaca gtcacaaatt tctctgttcc atagttaaag aagacatttg ccaacaggta 1860
gcatacgctc gtacatctt taaaaaaaaa atcgcagggt actagtataa taagctattt 1920
tcacaagcgc agcaatttca tggAACCTGC tcaaataaa tttgtacata ttgttataat 1980
aaattttaag gtcttaacta ttaacttgat tgaaaaaaagc tt 2022

<210> 3
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
DAX-1 gene

<400> 3
taccaaggag tacgcctacc tca

<210> 4
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
DAX-1 gene

<400> 4
cacgtccggg ttaaagagca 20

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
cyclophilin B gene

<400> 5
actgaagcac tacgggcctg 20

<210> 6
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
cyclophilin B gene

<400> 6
agccgttgtt gtctttgcc 19

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
ribosomal protein S9 gene

<400> 7
ggtaaaatcc accctggcca 20

<210> 8
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
ribosomal protein S9 gene

<400> 8
tctcatcaag cgtcagcagt tc

22

<210> 9
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
beta-actin gene

<400> 9
tggaacggtg aaggtgaca

19

<210> 10
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
beta-actin gene

<400> 10
ggcaaggac ttcctgtaa

19

<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
GAPDH gene

<400> 11
cgtcatgggt gtgaaccatg

20

<210> 12
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer for the
GAPDH gene

<400> 12

gctaaggagt tggtggtgca g

21

<210> 13

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for the
transferrin receptor gene

<400> 13

gtcgctggtc agttcgtgat t

21

<210> 14

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer for the
transferrin receptor gene

<400> 14

agcagttggc tgggttaccc ctc

23

<210> 15

<211> 1413

<212> DNA

<213> Homo sapiens

<400> 15

atggcggggcg agaaccacca gtggcaggggc agcatcctct acaacatgct tatgagcgcg 60
aagcaaacgc gcgcggctcc tgaggctcca gagacgcggc tggtgatca gtgttggggc 120
tgttcgtgcg gcgatgagcc cgggggtgggc agagaggggc tgcgtggcg gcggAACgtg 180
gcgcctctgt accgcgtctg cttttgcgtt aaagaccacc cacggcaggg cagcatcctc 240
tacagcatgc tgacgagcgc aaagcaaacc tacgcggcac cgaaggcgcc cgaggcgacg 300
ctgggtccgt gctggggctg ttctgtcgcc tctgatccc ggggtggcag agcggggctt 360
ccgggtgggc ggcccgtggc actcctgtac cgctgtgtct tttgtggta agaccacccg 420
cggcaggcgca gcatcctcta cagcttgctc actagctcaa agcaaaacgc cgtggctccg 480
gcagcgcccc aggcacggcc aggggggcgcc tggtgccgacc gctctactt cgccgcagagg 540
ccagggggta aagaggcgct accaggcgcc cggccacgg cgcttctgtt ccgcgtgtgc 600
ttttgcgggt aagaccaccc gcaagcaggcc agcaccctct actgcgtgcc cacgagcaca 660
aatcaagcgc aggcggctcc ggaggagcgg ccgaggggcc cctggtgccg caccctct 720
ggtcgcgtgc ggccgggtggc gctcaagagt ccacaggtgg tctgcgaggc agcctcaagcg 780
ggcctgttga agacgctgcg ctgcgtcaag tactggccct gcttccaggt gctgcctctg 840
gaccagcagc tggtgctggt ggcgaactgc tggcggtccc tgctcatgct tgagctggcc 900
caggaccgct tgcaggcgtga gactgtggaa gtctcgagc ccagcatgct gcagaagatc 960
ctcaccacca ggcggggggc gaccgggggc aacgagccac tgccgtgcc cacgctgcag 1020
caccatgg caccggccgc ggaggccagg aaggtggccct ccgcctccca ggtccaagcc 1080
atcaagtgct ttcttccaa atgctggagt ctgaacatca gtaccaagga gtacgcctac 1140
ctcaagggga ccgtgcttta aacccggac gtggccggcc tgcagtgcgt gaagtacatt 1200
cagggactcc agtggggaaac tcagcaaata ctcaatgtac acaccaggat gacgcaccaa 1260
ggggcccatg acagattcat cgaacttaat agtaccctt tccgtctgag attcatcaat 1320

gccaatgtca ttgctgaact gttcttcagg cccatcatcg gcacagtcag catggatgat 1380
atgatgctgg aaatgctctg tacaaagata taa 1413